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ELI LILLY AND COMPANY

By Rimdam D. Durbina

Date March 22, 2006

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Richard Dennis DiMarchi, et al. )  
Serial No. : 10/516,490 )  
International : Confirmation No.: 8626 )  
Application Date : June 2, 2003 )  
For : Modified Glucagon-Like Peptide-1 Analogs )  
Docket No. : X-15642 )


**STATEMENT TO SUPPORT FILING AND SUBMISSION IN ACCORDANCE**  
**WITH 37 C.F.R. 1.821(f) (SEQUENCE LISTING)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I hereby affirm that the content of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 C.F.R. 1.821(c) and (e), respectively, are the same.

Respectfully submitted,

  
Alejandro Martinez  
Agent for Applicants  
Registration No. 58,163  
Phone: 317-277-4260

Eli Lilly and Company  
Patent Division  
P.O. Box 6288  
Indianapolis, Indiana 46206-6288

March 22, 2006



SOC

**STIC Biotechnology Systems Branch**

**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/516,490A  
Source: PCF/10  
Date Processed by STIC: 1/16/06

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

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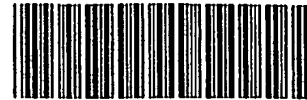
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Revised 01/24/05



PCT

## RAW SEQUENCE LISTING

DATE: 01/10/2006

PATENT APPLICATION: US/10/516,490A

TIME: 08:39:08

Input Set : A:\X15642.Nat1Phase.ST25.txt

Output Set: N:\CRF4\01102006\J516490A.raw

3 <110> APPLICANT: Richard Dennis DiMarchi  
4 David Lee Smiley  
5 Lianshan Zhang  
7 <120> TITLE OF INVENTION: MODIFIED GLUCAGON-LIKE PEPTIDE-1 ANALOGS  
9 <130> FILE REFERENCE: X-15642 National Phase  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/516,490A  
C--> 11 <141> CURRENT FILING DATE: 2004-12-01  
11 <160> NUMBER OF SEQ ID NOS: 24  
13 <170> SOFTWARE: PatentIn version 3.2  
15 <210> SEQ ID NO: 1  
16 <211> LENGTH: 31  
17 <212> TYPE: PRT  
18 <213> ORGANISM: Artificial  
20 <220> FEATURE:  
21 <223> OTHER INFORMATION: Synthetic constructs  
24 <220> FEATURE:  
25 <221> NAME/KEY: MISC\_FEATURE  
26 <222> LOCATION: (1)..(1) ✓  
27 <223> OTHER INFORMATION: Xaa= L-histidine, D-histidine, desamino-histidine,  
28 2-amino-histidine, beta-hydroxy-  
29 histidine, homohistidine, alpha-fluoromethyl-histidine, or alpha  
30 methyl-histidine  
32 <220> FEATURE:  
33 <221> NAME/KEY: MISC\_FEATURE  
34 <222> LOCATION: (2)..(2) ✓  
35 <223> OTHER INFORMATION: Xaa= Ala, Gly, Val, Leu, Ile, Ser, or Thr  
37 <220> FEATURE:  
38 <221> NAME/KEY: MISC\_FEATURE  
39 <222> LOCATION: (6)..(6) ✓  
40 <223> OTHER INFORMATION: Xaa= Phe, Trp, or Tyr  
42 <220> FEATURE:  
43 <221> NAME/KEY: MISC\_FEATURE  
44 <222> LOCATION: (10)..(10) ✓  
45 <223> OTHER INFORMATION: Xaa= Val, Trp, Ile, Leu, Phe, or Tyr  
47 <220> FEATURE:  
48 <221> NAME/KEY: MISC\_FEATURE  
49 <222> LOCATION: (12)..(12)  
50 <223> OTHER INFORMATION: Xaa= Ser, Trp, Tyr, Phe, Lys, Ile, Leu, Val  
52 <220> FEATURE:  
53 <221> NAME/KEY: MISC\_FEATURE  
54 <222> LOCATION: (13)..(13)  
55 <223> OTHER INFORMATION: Xaa= Tyr, Trp, or Phe  
57 <220> FEATURE:

*2-3,5-7*  
**Does Not Comply  
Corrected Diskette Needed**

## RAW SEQUENCE LISTING

DATE: 01/10/2006

PATENT APPLICATION: US/10/516,490A

TIME: 08:39:08

Input Set : A:\X15642.NatlPhase.ST25.txt

Output Set: N:\CRF4\01102006\J516490A.raw

```

58 <221> NAME/KEY: MISC_FEATURE
59 <222> LOCATION: (14)..(14)
60 <223> OTHER INFORMATION: Xaa= Leu, Phe, Tyr, or Trp
62 <220> FEATURE:
63 <221> NAME/KEY: MISC_FEATURE
64 <222> LOCATION: (16)..(16)
65 <223> OTHER INFORMATION: Xaa= Gly, Glu, Asp, Lys
67 <220> FEATURE:
68 <221> NAME/KEY: MISC_FEATURE
69 <222> LOCATION: (19)..(19)
70 <223> OTHER INFORMATION: Xaa= Ala, Val, Ile, or Leu
72 <220> FEATURE:
73 <221> NAME/KEY: MISC_FEATURE
74 <222> LOCATION: (21)..(21)
75 <223> OTHER INFORMATION: Xaa= Glu, Ile, or Ala
77 <220> FEATURE:
78 <221> NAME/KEY: MISC_FEATURE
79 <222> LOCATION: (24)..(24)
80 <223> OTHER INFORMATION: Xaa= Ala, or Glu
82 <220> FEATURE:
83 <221> NAME/KEY: MISC_FEATURE
84 <222> LOCATION: (27)..(27)
85 <223> OTHER INFORMATION: Xaa= Val, or Ile
87 <220> FEATURE:
88 <221> NAME/KEY: MISC_FEATURE
89 <222> LOCATION: (31)..(31)
90 <223> OTHER INFORMATION: Xaa= L-Cys, D-Cys, homocysteine, or penicillamine
92 <400> SEQUENCE: 1
W--> 94 Xaa Xaa Glu Gly Thr Xaa Thr Ser Asp Xaa Ser Xaa Xaa Xaa Glu Xaa
      95 1          5          10          15
W--> 98 Gln Ala Xaa Lys Xaa Phe Ile Xaa Trp Leu Xaa Lys Gly Arg Xaa
      99          20          25          30
102 <210> SEQ ID NO: 2
103 <211> LENGTH: 31
104 <212> TYPE: PRT
105 <213> ORGANISM: Artificial
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Synthetic construct
111 <220> FEATURE:
112 <221> NAME/KEY: MISC_FEATURE
113 <222> LOCATION: (1)..(1)
114 <223> OTHER INFORMATION: Xaa= L-histidine, D-histidine, desamino-
histidine,
115      2-amino-histidine, beta-hydroxy-
116      histidine, homohistidine, alpha-fluoromethyl-histidine, or
117      alpha-methyl-histidine
119 <220> FEATURE:
120 <221> NAME/KEY: MISC_FEATURE
121 <222> LOCATION: (2)..(2)
122 <223> OTHER INFORMATION: Xaa= Gly, Ala, Val, Leu, Ile, Ser or Thr

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## RAW SEQUENCE LISTING

DATE: 01/10/2006

PATENT APPLICATION: US/10/516,490A

TIME: 08:39:08

Input Set : A:\X15642.NatlPhase.ST25.txt

Output Set: N:\CRF4\01102006\J516490A.raw

124 <220> FEATURE:  
 125 <221> NAME/KEY: MISC\_FEATURE  
 126 <222> LOCATION: (10)..(10)  
 127 <223> OTHER INFORMATION: Xaa = Val, Phe, Tyr, or Trp  
 129 <220> FEATURE:  
 130 <221> NAME/KEY: MISC\_FEATURE  
 131 <222> LOCATION: (12)..(12)  
 132 <223> OTHER INFORMATION: Xaa = Ser, Tyr, Trp, Phe, Lys, Ile, Leu, or Val  
 134 <220> FEATURE:  
 135 <221> NAME/KEY: MISC\_FEATURE  
 136 <222> LOCATION: (16)..(16)  
 137 <223> OTHER INFORMATION: Xaa = Gly, Clu Asp, or Lys *do you mean Glu?*  
 139 <220> FEATURE:  
 140 <221> NAME/KEY: MISC\_FEATURE  
 141 <222> LOCATION: (19)..(19)  
 142 <223> OTHER INFORMATION: Xaa = Ala, Val, Ile, or Leu  
 144 <220> FEATURE:  
 145 <221> NAME/KEY: MISC\_FEATURE  
 146 <222> LOCATION: (27)..(27)  
 147 <223> OTHER INFORMATION: Xaa = Val or Ile  
 149 <220> FEATURE:  
 150 <221> NAME/KEY: MISC\_FEATURE  
 151 <222> LOCATION: (31)..(31)  
 152 <223> OTHER INFORMATION: Xaa = L-Cys, D-Cys, homocysteine, or  
 penicillamine  
 154 <400> SEQUENCE: 2  
 W--> 156 Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Tyr Leu Glu Xaa  
 157 1 5 10 15  
 W--> 160 Gln Ala Xaa Lys Glu Phe Ile Ala Trp Leu Xaa Lys Gly Arg Xaa  
 161 20 25 30  
 164 <210> SEQ ID NO: 3  
 165 <211> LENGTH: 42  
 166 <212> TYPE: PRT  
 167 <213> ORGANISM: Artificial  
 169 <220> FEATURE:  
 170 <223> OTHER INFORMATION: Synthetic construct  
 173 <220> FEATURE:  
 174 <221> NAME/KEY: MISC\_FEATURE  
 175 <222> LOCATION: (1)..(1)  
 176 <223> OTHER INFORMATION: Xaa = L-histidine, D-histidine, desamino-  
 histidine,  
 177 2-amino-histidine, beta-hydroxy-  
 178 histidine, homohistidine, alpha-fluoromethyl-histidine, or  
 179 alpha-methyl-histidine  
 181 <220> FEATURE:  
 182 <221> NAME/KEY: MISC\_FEATURE  
 183 <222> LOCATION: (2)..(2)  
 184 <223> OTHER INFORMATION: Xaa = Ala, Gly, Val, Leu, Ile, Ser, or Thr  
 186 <220> FEATURE:  
 187 <221> NAME/KEY: MISC\_FEATURE  
 188 <222> LOCATION: (6)..(6)

## RAW SEQUENCE LISTING

DATE: 01/10/2006

PATENT APPLICATION: US/10/516,490A

TIME: 08:39:08

Input Set : A:\X15642.NatlPhase.ST25.txt

Output Set: N:\CRF4\01102006\J516490A.raw

189 <223> OTHER INFORMATION: Xaa = Phe, Trp, or Tyr  
191 <220> FEATURE:  
192 <221> NAME/KEY: MISC\_FEATURE  
193 <222> LOCATION: (10)..(10)  
194 <223> OTHER INFORMATION: Xaa = Val, Trp, Ile, Leu, Phe, or Tyr  
196 <220> FEATURE:  
197 <221> NAME/KEY: MISC\_FEATURE  
198 <222> LOCATION: (12)..(12)  
199 <223> OTHER INFORMATION: Xaa = Ser, Trp, Tyr, Phe, Lys, Ile, Leu, Val  
201 <220> FEATURE:  
202 <221> NAME/KEY: MISC\_FEATURE  
203 <222> LOCATION: (13)..(13)  
204 <223> OTHER INFORMATION: Xaa = Tyr, Trp, or Phe  
206 <220> FEATURE:  
207 <221> NAME/KEY: MISC\_FEATURE  
208 <222> LOCATION: (14)..(14)  
209 <223> OTHER INFORMATION: Xaa = Leu, Phe, Tyr, or Trp  
211 <220> FEATURE:  
212 <221> NAME/KEY: MISC\_FEATURE  
213 <222> LOCATION: (16)..(16)  
214 <223> OTHER INFORMATION: Xaa = Gly, Glu, Asp, or Lys  
216 <220> FEATURE:  
217 <221> NAME/KEY: MISC\_FEATURE  
218 <222> LOCATION: (19)..(19)  
219 <223> OTHER INFORMATION: Xaa = Ala, Val, Ile, or Leu  
221 <220> FEATURE:  
222 <221> NAME/KEY: MISC\_FEATURE  
223 <222> LOCATION: (21)..(21)  
224 <223> OTHER INFORMATION: Xaa = Glu, Ile, or Ala  
226 <220> FEATURE:  
227 <221> NAME/KEY: MISC\_FEATURE  
228 <222> LOCATION: (24)..(24)  
229 <223> OTHER INFORMATION: Xaa = Ala or Glu  
231 <220> FEATURE:  
232 <221> NAME/KEY: MISC\_FEATURE  
233 <222> LOCATION: (27)..(27)  
234 <223> OTHER INFORMATION: Xaa = Val or Ile  
236 <220> FEATURE:  
237 <221> NAME/KEY: MISC\_FEATURE  
238 <222> LOCATION: (28)..(28)  
239 <223> OTHER INFORMATION: Xaa = Lys, Asp, Arg, or Glu  
241 <220> FEATURE:  
242 <221> NAME/KEY: MISC\_FEATURE  
243 <222> LOCATION: (30)..(30)  
244 <223> OTHER INFORMATION: Xaa = Gly, Pro, or Arg  
246 <220> FEATURE:  
247 <221> NAME/KEY: MISC\_FEATURE  
248 <222> LOCATION: (31)..(31)  
249 <223> OTHER INFORMATION: Xaa = Gly, Pro, Ser, L-Cys, D-Cys, homocysteine,  
or penicillamine

## RAW SEQUENCE LISTING

DATE: 01/10/2006

PATENT APPLICATION: US/10/516,490A

TIME: 08:39:08

Input Set : A:\X15642.Nat1Phase.ST25.txt

Output Set: N:\CRF4\01102006\J516490A.raw

251 <220> FEATURE:  
 252 <221> NAME/KEY: MISC\_FEATURE  
 253 <222> LOCATION: (32)..(32)  
 254 <223> OTHER INFORMATION: Xaa = Ser, Pro, His, L-Cys, D-Cys, homocysteine,  
 penicillamine, NH2 *do you mean "amidation"? If so, please add "amidated" to "NH2"*  
 255  
 257 <220> FEATURE:  
 258 <221> NAME/KEY: MISC\_FEATURE  
 259 <222> LOCATION: (33)..(33)  
 260 <223> OTHER INFORMATION: Xaa = Ser, Arg, Thr, Trp, Lys, L-Cys, D-Cys,  
 homocysteine,  
 261 penicillamine, NH2 or  
 262 is absent  
 264 <220> FEATURE:  
 265 <221> NAME/KEY: MISC\_FEATURE  
 266 <222> LOCATION: (34)..(34)  
 267 <223> OTHER INFORMATION: Xaa = Ser, Gly, L-Cys, D-Cys, homocysteine,  
 penicillamine, NH2,  
 268 or is absent  
 270 <220> FEATURE:  
 271 <221> NAME/KEY: MISC\_FEATURE  
 272 <222> LOCATION: (35)..(35)  
 273 <223> OTHER INFORMATION: Xaa = Ala, Asp, Arg, Glu, Lys, Gly, L-Cys, D-Cys,  
 homocysteine,  
 274 penicillamine,  
 275 NH2 or is absent  
 277 <220> FEATURE:  
 278 <221> NAME/KEY: MISC\_FEATURE  
 279 <222> LOCATION: (36)..(36)  
 280 <223> OTHER INFORMATION: Xaa = Pro, Ala, L-Cys, D-Cys, homocysteine,  
 penicillamine, NH2,  
 281 or is absent  
 283 <220> FEATURE:  
 284 <221> NAME/KEY: MISC\_FEATURE  
 285 <222> LOCATION: (37)..(37)  
 286 <223> OTHER INFORMATION: Xaa = Pro, Ala, L-Cys, D-Cys, homocysteine,  
 penicillamine, NH2 or  
 287 is absent  
 289 <220> FEATURE:  
 290 <221> NAME/KEY: MISC\_FEATURE  
 291 <222> LOCATION: (38)..(38)  
 292 <223> OTHER INFORMATION: Xaa = Pro, Ala, Arg, Lys, His, L-Cys, D-Cys, Cys,  
 homocysteine,  
 293 penicillamine, NH2 or  
 294 is absent  
 296 <220> FEATURE:  
 297 <221> NAME/KEY: MISC\_FEATURE  
 298 <222> LOCATION: (39)..(39)  
 299 <223> OTHER INFORMATION: Xaa = Ser, His, Pro, Lys, Arg, L-Cys, D-Cys,  
 homocysteine,  
 300 penicillamine, NH2 or  
 301 is absent  
 303 <220> FEATURE:

304 <221> NAME/KEY: MISC\_FEATURE  
 305 <222> LOCATION: (40)..(40)  
 306 <223> OTHER INFORMATION: Xaa = His, Ser, Arg, Lys, L-Cys, D-Cys,  
 homocysteine,  
 307 penicillamine, NH<sub>2</sub> or

*Please ensure that amino acids are  
 spelled correctly in subsequent sequences.*



RAW SEQUENCE LISTING ERROR SUMMARY  
 PATENT APPLICATION: US/10/516,490A

DATE: 01/10/2006  
 TIME: 08:39:09

Input Set : A:\X15642.Nat1Phase.ST25.txt  
 Output Set: N:\CRF4\01102006\J516490A.raw

*FYI*

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220>

to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27, 31  
 Seq#:2; Xaa Pos. 1, 2, 10, 12, 16, 19, 27, 31  
 Seq#:3; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27, 28, 30, 31, 32, 33, 34, 35, 36  
 Seq#:3; Xaa Pos. 37, 38, 39, 40, 41, 42  
 Seq#:4; Xaa Pos. 1, 2, 10, 16, 19, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42  
 Seq#:5; Xaa Pos. 1, 2, 16, 19, 27, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42  
 Seq#:6; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27, 28, 30, 31, 32, 33, 34, 35, 36  
 Seq#:6; Xaa Pos. 37, 38, 39, 40, 41, 42, 43, 44, 45  
 Seq#:7; Xaa Pos. 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45  
 Seq#:8; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27  
 Seq#:9; Xaa Pos. 1, 2, 10, 12, 16, 19, 27  
 Seq#:10; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27, 28, 30, 31, 32, 33, 34, 35, 36  
 Seq#:10; Xaa Pos. 37, 38, 39, 40, 41, 42  
 Seq#:11; Xaa Pos. 1, 2, 10, 16, 19, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42  
 Seq#:12; Xaa Pos. 1, 2, 16, 19, 27, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42  
 Seq#:13; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27, 28, 30, 31, 32, 33, 34, 35, 36  
 Seq#:13; Xaa Pos. 37, 38, 39, 40, 41, 42, 43, 44, 45  
 Seq#:14; Xaa Pos. 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45  
 Seq#:15; Xaa Pos. 1, 2, 6, 10, 12, 13, 14, 16, 19, 21, 24, 27, 31

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22

## VERIFICATION SUMMARY

DATE: 01/10/2006

PATENT APPLICATION: US/10/516,490A

TIME: 08:39:09

Input Set : A:\X15642.NatlPhase.ST25.txt

Output Set: N:\CRF4\01102006\J516490A.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16  
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:16  
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16  
L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:32  
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16  
L:474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:32  
L:583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16  
L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32  
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16  
L:770 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:32  
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:16  
L:873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:32  
L:951 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:16  
L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:1012 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:16  
L:1160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:1164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:16  
L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:32  
L:1286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:1290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:16  
L:1294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:32  
L:1391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:1395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:16  
L:1399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:32  
L:1561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:1565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:16  
L:1569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:32  
L:1658 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:16  
L:1662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:32  
L:1745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:1749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16